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PARTNERS FOR ENVIRONMENTAL PROGRESS: A NEW MISSION FOR THE CORPS

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ABSTRACT

In May of 1990 the U.S. Army Corps of Engineers embarked on a new initiative designed to meet the country's aging environmental infrastructure needs and increasing regulatory and environmental requirements. This new program has been coined Partners for Environmental Progress, or PEP. PEP focuses on the restoration of a variety of environmental quality support services, including water supply, wastewater treatment, solid waste management, and waste-to-energy generation programs. Through PEP the Corps joins with a local entity, or Sponsor, to produce a Market Feasibility Study (MFS). The MFS is devised to determine opportunities for, and to encourage the inception of environmental infrastructure privatization. During fiscal year (FY) 1992, the Army Corps began thirteen PEP projects, each to be completed in November of that year. During the summer of 1992, I spent time working with the PEP project manager at the Huntington District. Many inadequacies related to the management of a particular project became apparent to me. This thesis focuses on these problems and offers a few suggestions to enhance future projects in this promising new program.

Introduction

Beyond serving as the engineering, construction, and research and development crew for the Nation's Army and Air Force, the Army Corps of Engineers (Corps) is authorized to manage and execute national Civil Works programs as they relate to the country's waterways (Fed Reg 1986). This manual also outlines the federal Civil Works hierarchy (Figure 1). Serving under the President of the United States in the Defense Department is the Secretary of the Army. The Assistant Secretary of the Army (Civil Works) reports to the Secretary. The Director of Civil Works is then seated under the Assistant Secretary. And, the person directly responsible for the management of the Corps is the Chief of Engineers. He or she takes orders from the Director of Civil Works. Under the Chief are eleven Division Engineers. Each Division is divided into Districts: the boundaries of which are illustrated in the *Sponsors' Partnership Kit*, a packet distributed by the Corps (Figure 2). This pamphlet shows that the Huntington District lies within the Ohio River Division. As indicated in this

document, each District is once again divided into Divisions which are then separated into Branches (Figure 3). At the Huntington District the PEP program is managed by John Yeager, an economist in the Resource Evaluation Branch of the Planning Division.

On May 22, 1990, the Corps presented PEP, and the need for such a program to the American public through *Corps Facts No. 8* (a public relations fact sheet). Without doubt, the environmental foundation upon which the continuance and growth of our communities depend is crumbling. The Corps established PEP to encourage and facilitate privatization as a means of upgrading these deteriorating support services.

Several continuing factors have adversely affected public ownership of these environmental services. Included in this list of obstacles is the growing Federal deficit. This restriction has spurred a reduction in the Federal grants currently available to local governments for such programs. All across the nation there are wastewater treatment facilities, water supply systems and municipal solid waste facilities that have not been upgraded in the past ten, 20 even 30 years. Meanwhile, growing urban and suburban populations continue to place increased demands on community support services. These problems, propelled by the race for environmental regulatory compliance, have left many communities entangled in a web of increasing regulations, while they find themselves with less funding to make the necessary improvements.

According to the fact sheet, in 1988 then Assistant Secretary of the Army (Civil Works) Robert W. Page began working toward the development of this new initiative, PEP. Through the years he maintained his vision of the Corps' role in helping communities alleviate these burdens through privatization. Through this mechanism the Corps would help communities explore the potential for private ownership, operation and/or maintenance of facilities which serve the public. The program was intended to focus on small communities that lack the financial backing and the technical expertise to formulate a credible plan. A plan that could ensure a sound investment for the private entity. Although the Corps' role encompasses only the production of a market feasibility study, that is the critical first step on the road towards privatization.

By 1991 the program gained

funding. The new initiative has been authorized and monies appropriated through 1994 by the Energy and Water Development Appropriations Act (USACE 1991 and Dorn 1992). The House Report accompanying the original legislation stated:

> "Development of a Federal Infrastructure Strategy: The Committee has increased the budget for Special Studies by $650,000 to be used in pursuing opportunities for providing local infrastructure facilities. The Committee intends the Department of the Army to work...in partnership with State and local governments." (From HR no. 101.536 p22)

Initially, the Committee intended the Corps to work in cooperation with the other Federal agencies as well. At the time of authorization it was assumed that various agencies could easily intertwine their relative privatization programs into a single working system. However, as the programs are currently administered this union is not yet feasible.

The Corps' privatization program is outlined in an internal memo titled: *Guidelines for Market Feasibility Studies (MFS) Part of Partners for Environmental Progress (PEP) Program.* This document details the program beginning with the purpose and authorization. The memo then indicates that the Districts are to notify communities of the program's benefits and its limitations. When an eligible community contacts a District to form a partnership, a MFS Agreement between the Corps and the Sponsor is written to define the scope of studies. This Agreement specifies the objective of the study and the roles and responsibilities of each party. This section of the Agreement indicates that, for the most part, the Sponsor will be responsible for gathering the necessary data and supplying it to the Corps. It is the Corps' responsibility to analyze the data and provide the results in a MFS. Furthermore, it is interesting to note that the Agreement stipulates that "neither party is to be considered the agent, officer or employer of the other" (USACE 1992).

Finally, a proposal is prepared and presented to a Technical Review Team (TRT) at the Huntsville Division office. The review panel must consider, among other issues, the limitations of the PEP program. Unlike most Corps programs, this program has been authorized with rather definite limitations of both time and funding. To conserve funds within the program each project is limited to just $100,000 of Federal funding.

Furthermore, the criteria upon which the candidate proposals are ranked considers cost effectiveness. The review panel generally awards a higher rank to the studies of lower cost. Incidentally, the most expensive PEP project conducted by the Huntington District incurred a cost of only 50,000 Federal dollars. And, as much as time is money, each project must be completed no later than one year after the contractual agreement is signed by both parties. The primary restrictions of time and money limit the number of national projects that can be authorized in any given year. In 1992 fourteen demonstration projects were selected for study, according to a memorandum distributed by the Director of Civil Works, Arthur E. Williams.

It is the purpose of this thesis to review the PEP process as it was conducted at the Huntington District office. I will focus on the problems encountered and suggest methods of improvement that can be achieved through enhanced communication and resource efficiency.

The Central Ohio Dilemma

The Huntington District submitted five proposals for the PEP program in FY 1992. Nationally, 31 proposals were presented to the Technical Review Team (TRT) of which 14 were funded (Williams 1992). Of those 14, three were presented by the Huntington District. This District is unique in that it confronted the widest range of privatization issues. Together, the three projects addressed all the infrastructure needs outlined in the national plan. Huntington was the only district to initiate wastewater treatment, water supply, solid waste management and waste-to-energy generation projects all in the first year. The projects also encompassed a variety of locality types. The wastewater project was sponsored by the Commonwealth of Kentucky. For this project team conducted a reconnaissance study of a 12-county region with a population of only 333,000. Marion County, Ohio asked the District to assist it in solving the problem of water supply in that county of low density. And finally, Huntington addressed the issues of solid waste and waste-to-energy generation in the large, metropolitan region of Columbus, Ohio. This single city has a population approaches one millon (Christian 1991). Incidentally, this Central Ohio solid waste proposal was ranked at the top of the review committee's list. It was given the highest priority of the 14 projects chosen (Williams 1992).

For this study, I will focus my attention on the latter project. The dilemma presented by the Central Ohio project was outlined in the PEP proposal that Mr. Yeager sent to the TRT. In recent years numerous laws, amendments and resolutions have spun a complex web around the business of solid waste management (EPA 1989) (Figure 4). To help untangle this jumble of regulations the City of Columbus drafted Resolution Number 206X 91 on November 9, 1991 "to urge the immediate and mutual cooperation between the City and the [Solid Waste Authority of Central Ohio]" (formerly the Franklin County Regional Solid Waste Management Authority). At the time the Authority owned the county landfill and the City owned the Solid Waste Reduction Facility (SWRF), a trash burning power plant. This split ownership lead to competition between the two entities. For instance, in order to meet the compliance requirements for the aforementioned regulations the Authority was forced to increase restrictions and tipping fees (the dollar amount charged per load of waste dumped) for all haulers, including the City (Powers 1992a). Meanwhile, the City was encountering ever more serious problems at the SWRF, some of which were life threatening. Numerous incidents of hazardous substances entering the waste shredding facilities and the trash burning facility had resulted in explosions. The explosions, combined with the constant disputes about the operation of the landfill, prompted the Columbus City Council to pen a resolution. The Council insisted that the City and the Authority " resolve operational and safety issues at the SWRF", and it declared this issue an emergency (Council 1991).

Resolution 206X 91 indicated that the City might one day transfer its SWRF over to the Authority. In light of this, the Council urged all entities involved in the Franklin County solid waste process to cooperate with the Authority, and to provide it with their recommendations. The Council also requested that the City, in cooperation with the Authority, draft "a long term plan that would include separation, recycling and elimination of hazardous materials from Columbus/Franklin County trash flow in the most cost effective manner by conducting a state-of-the-art review of the industry for what system or systems best fit the Authority's jurisdiction". This master plan, which is required by the Ohio EPA pursuant to HB 592, became the basis of this PEP project (Yeager 1991).

To meet the sum of requirements

set by the various Federal and State laws the Authority determined that some type of Front-End-Separator (FES) should be installed (Figure 5). A FES does just that: it is a large, mostly mechanical device that separates and shreds waste as it enters the SWRF. The FES will divide the waste stream into many components: shreddable, easily burnable, non-burnable, yard waste, construction debris, hazardous waste and recyclable materials (Powers 1992b). Again, the purpose of the SWRF is to reduce the amount of waste reaching the landfill. In the process of reducing the city's waste to fly ash the facility produces energy. However, due to frequent shutdowns caused by the introduction of hazardous materials into the incinerator, the energy supply was never consistent. Furthermore, due to the variable nature of the solid waste stream coupled with the fact that the waste was minimally sorted the City was not in compliance with the Clean Air Act.

A FES promised to solve all these problems. A FES would enable the plant operator to remove hazardous materials, and thus reduce toxic air emissions. It would also enhance sorting. The proper mix of waste materials is necessary to produce an efficient burn, thus creating a more reliable energy source. And, the recovery of recyclable and compost materials could lead to a significant profit for the operator. The only question that remained was which system should the City and the Authority recommend to their constituents.

The purpose of the Franklin County Market Feasibility Study (MFS) was two-fold (Yeager 1991). First, it was necessary to define the requirements of a FES system for this particular metropolis. This study would determine how much of which waste materials are available in the county's waste stream. This information would allow the Sponsor to choose the proper system. The second goal was to develop an implementation strategy that focused on various privatization options. The different options were based on varying ratios of public and private investment, ownership, and operational responsibilities. In this step a Request for Proposal (RFP) is produced. The RFP indicates what the Sponsor wants in terms of privatization, and what they have to offer in terms of resources (USACE 1991). The completed RFP enables the Sponsor to solicit and accept bids on the proposed project.

To accomplish these goals it was

necessary for the Huntington team to immerse themselves in the world of solid waste. The team consisted of two individuals: John Yeager, the project manager, and Dr. Gregg Davis, a professor from Marshall University. Both men were employed as economists and neither was particularly familiar with the subject of solid waste management. To facilitate their introduction the Agreement stated that no more than seven tours were to be planned by the Sponsor to various FES-assisted solid waste facilities around the country. Only two tours were attended by either of the team members, due to scheduling conflicts. Therefore, the team's knowledge in this field was based solely on those two facility tours, and all that could be gleaned from trade magazines (Yeager 1992). Suffice it to say, their analysis of the situation rested on this brief and, in my opinion, inadequate introduction to the complex world of solid waste management.

Of the three projects coordinated by the Huntington District I chose to focus on the Franklin County study for a number of reasons. Most importantly, this project exposed the difficulties of working with a multi-party Sponsor. The efficiency of this project relied on the coordination of five entities (Figure 6). The partnership was founded by the Corps and Sponsor. In this case the Sponsor included two entities: the Solid Waste Authority of Central Ohio and the City of Columbus (the future and current owners of the Solid Waste Reduction Facility). In addition, the Authority hired two consulting firms to collect data, R.W. Beck of Denver, Colorado and Malcolm Pirnie, Inc. of Columbus, Ohio. Due to the extensive network of people representing different organizations this project demonstrated that it is imperative to quickly establish strong, reliable means of communication. The Central Ohio project also revealed the need to document and enforce roles of responsibility when dealing with so many entities. And finally, a most intriguing point was addressed by this project. This study challenged the traditional role of the Corps. This agency is attempting to establish a new mission beyond water resource issues, that of environmental steward. Therefore, along with suggestions for improvement, this study poses the questions: Are representatives of the U.S. Army Corps of Engineers prepared to confront the issues particular to solid waste management?, and Should the Corps become a leader in the battle for environmental protection?

Problems and Suggestions

Suggestions for improved project management techniques, focusing on the clarification of responsibilities, are outlined in this part of my review. More efficient use of all available resources would also improve the effectiveness of the program. Available resources include human resources, as well as informational resources. Accordingly, improved project management coupled with improved means of efficiency could turn PEP into a model Federal program.

The most important suggestions I can give stem from my observation of difficulties experienced with the Columbus project. The difficulties of coordinating multiple parties in a productive partnership became the basis of most of the obstacles encountered in this study. In all, there were five entities involved in this one PEP project. Under these circumstances, it was not surprising to discover that the Corps was presented with conflicting data on some occasions, and at other times they could not seem to get enough information. It seems that the separate entities were unaware of what the others were doing. Ultimately, little unity was demonstrated between the members of the Sponsor group, or for that matter between the Corps and the Sponsor.

This project demonstrated the need to itemize, in the Agreement, exactly what information is expected from the Sponsor, when it is needed, and to emphasize the need for group agreement prior to the release of any information to the Corps. To accomplish this level of cohesion, the various entities of a Sponsor group must remain in close contact with one another, and through a spokesperson they must develop strong lines of communication with the Corps.

Frequent meetings between the Corps and the Sponsor would benefit their relationship. To ensure that regular meetings take place they should be scheduled well in advance, even written into the Agreement. These meetings would greatly enhance the exchange of information and provide each party with periodic status reports. It is important that each entity supply the others with the information that they will be presenting--prior to the meeting. This will give each side time to review the material and formulate questions in advance. Other contributions of each entity, including funds spent on consulting firms, should also be made available for review. Quantifying the

contributions of each party is the responsibility of the Corps Project Manager. Making this information available at the scheduled meetings would keep all members abreast of where they stand and the progress of the project as a whole. By presenting this information along with a task schedule (Figure 7), the responsibilities of each group could be clearly expressed, and all members would be gently reminded to complete their tasks in a timely fashion.

The Columbus project has demonstrated that it is necessary to highlight another seemingly obvious requirement that serves to enhance the efficiency of any study. If the Sponsor enacts a plan that would greatly alter the results of the PEP study, they must inform the Corps team as soon as possible. In the Central Ohio case the Authority did just that: without considering the ramifications of its actions on the PEP study a new recycling plan was initiated. Meanwhile, the Corps team continued its study unknowingly working with "old" data. A community-wide recycling plan would change the amount of recoverable materials entering the FES, and thus reduce the profit available to the FES operator, public or private. This disregard for the Corps' efforts by the Authority resulted in wasted time and money. It also spawned additional frustration felt by the Corps team towards the Sponsor. By keeping the Corps team up to date on all actions that might affect the project the two entities can maintain a positive, progressive relationship. Showing respect for every members contributions will reassure all involved that each party holds this project in the highest regard.

Prearranged meetings would also help to maintain a high degree of communication among the members of the Sponsor group. Once the Agreement between the Corps and the Sponsor is signed, the members of the Sponsor group should meet to sign an agreement amongst themselves. Knowing what is expected by the Corps and when it is due they can now plan their own meetings to precede those scheduled with the Corps.

At this time the group should decide on the agenda of each meeting, and most importantly they must delegate a project manager of their own. The various entities must be aware of what is to be accomplished at each meeting. This could be accomplished in a three-step process. First, immediately following each meeting the members should be informed of the agenda for

the upcoming meeting via mail or fax. At least two weeks prior to the meeting, they should be expected to mail the information that they plan to present to the project manager. Finally, it should be this person's responsibility to collate the information and make it available to the remaining members. Providing an opportunity for the members to review the information prior to the meeting will facilitate decision making. In many instances, more than one member of the sponsor group is prepared to furnish the Corps with a requested set of information. At these times it is important for the Sponsor to demonstrate unity amongst its members. This review process will keep everyone informed of what the others have to offer. Allowing them, as a group, to define one, comprehensive data set unencumbered by conflicting information. It would then be the project manager's responsibility to deliver this final data set to the Corps. Having presented the proper information in a timely manner the project is more likely to proceed efficiently.

The following suggestion is directed towards the Corps side of the project. I recommend that great emphasis be placed on the efficient use of human resources. A Corps team consisting of a particular cast of character roles would expedite the completion of the PEP projects. These members should have varying titles including: economist, contract specialist, graphic artist, environmental engineer, computer specialist, communications specialist, regional planner, and environmental scientist. Each of these eight persons won't be needed on a daily basis for each project, but each should be available when needed. (The team members could even be "loaners" from other branches within the District.) To assure the availability of each member, a task schedule should be constructed once the Agreement is signed (Figure 7). This schedule would indicate when each portion of the study is due and whose assistance will be necessary to achieve the established goals. Thus, the table will coordinate the schedules of the team within a project, between PEP projects, and even between Branches.

To organize this intricate schedule will require a leader who expresses exemplary organizational skills, as well as a strong desire to manage the PEP projects. It is also necessary that the individual understand the different aspects of each project, as well as which of the members is best suited to provide the required information. When an

environmental scientist is available, I would suggest that he or she be awarded the position of PEP Project Manager. Of all the members, this person is the most likely to have the educational experiences and/or training which encompasses elements of each of the other's expertise. This training enables the environmental scientist to realize what capabilities can be expected of each of the members. The environmental scientist also should have the most complete knowledge of environmental infrastructure facilities, the problems inherent to each, and the laws regulating them. In the beginning it may not seem cost effective to have a team of so many players. However, the efficiency of a well organized group armed with the necessary expertise will undoubtedly prove most effective. By maintaining a highly compatible group over the years, a District will be able to complete additional projects with each passing fiscal year.

Furthermore, when the budget is tight, it is not necessary to hire eight different employees. Many people have highly diversified backgrounds. Take advantage of the engineer's drafting skills for needed graphics, or the economist who is also a computer whiz. Another beneficial characteristic to consider when building a team is consulting experience. First-hand knowledge of how the private sector works cannot be taught in a training seminar. Even more importantly, previous experience, knowledge and concern for environmental issues must be stressed. For the Corps to prove it is "Environmentally Friendly" it must have a highly credible work force executing its environmental goals. Thorough understanding of environmental infrastructure is vital: undertaking a PEP project without this expertise could prove a serious error. Untimely setbacks as knowledge is gained, and even evaluation errors, may result if a high level of understanding is not made a primary importance.

Still, the Corps as an agency must demonstrate the significance of this program to the PEP Project Managers. By limiting the Managers to only PEP projects, and by increasing the total number of team members a sense of priority will be experienced. Hence, a higher level of efficiency can be maintained.

Once the Corps-Sponsor relationship is established and the Corps team is coordinated, it may prove beneficial to contact representatives of other governmental agencies. As mentioned earlier, PEP was designed to

bring together the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy (DoE) and the Corps to solve these infrastructure dilemmas through coordination of similar programs mandated for each agency. This quickly proved too cumbersome because the alternate programs were not as similar as they first appeared. Adding the fact that Federal agencies are none too eager to work together (Petulla 1987), it is not surprising to find that the plan to coordinate various privatization programs was dropped. The difficulties of the Columbus project exemplified the merits of this decision. The total number of entities must, at some point, be limited for the sake of efficiency.

Considering the difficulties experienced while attempting to coordinate multiple entities, and weighing them against the benefits of a coordinated interagency effort, I suggest that the privatization programs of the various agencies be integrated only through a well-devised plan. The expertise available from these other Federal agencies is undeniable. To take full advantage of this expertise, interagency consultations could be scheduled in the Agreement. If another agency holds some regulatory or permit function over the future PEP project, it is essential for the Corps to consult with that agency in the planning stage. By maintaining a working relationship with the privatization representatives of other agencies, important issues could be addressed before a project is finalized. Strong networks should be developed for the exchange of this vital information. Such networks have already been organized with other agencies and these relationships greatly facilitate various project types that the Corps currently conducts. Again, it is all about using the available resources in a wise and efficient manner.

The PEP reports themselves can also become a valuable resource. The final reports should be compiled annually for review by the public to encourage privatization with limited federal assistance. Other communities, that for one reason or another are not chosen to participate in the program could utilize these reports as guidelines to produce their own Market Feasibility Studies (MFS). If they decide that privatization could solve their problems, they should continue the process by preparing Request for Proposals to entice private business, thereby effecting privatization on their own means. Also, entrepreneurs, as well as established businesses--neither of which are

currently eligible--could find the necessary incentive to enter the environmental infrastructure business by reviewing other MFS's. By relating the circumstances of their own situation they may discover a profitable new business venture in infrastructure investments. In this case, two steps in the process would be eliminated. Instead of a community searching for the right company, the company could find the community, with minimal Federal assistance. Finally, other Districts could benefit from previous PEP reports, not to mention reports from other agencies. One of the most effective efficiency techniques is learning from the mistakes and accomplishments of others. There is no need to stumble through the forest when another has just cleared a path.

To further improve this efficiency-by-review process the Project Manager should be accessible to managers of infrastructure facilities for clarification or redirection. The Managers should realize that as a civil servant it is their duty to help those in need of their expertise, regardless of the presence or lack thereof of a formal agreement. Likewise, it would be beneficial if communities could ask questions of previous Sponsors, or if private a businessperson could ask another about the benefits of investing in environmental infrastructure. Because it is understood that the amount of in-depth questioning would have to be limited sources should be released for further research. Still, a little advice might be all that is needed to spur privatization without Federal funding.

The most useful product that might stem from such a compilation of privatization reports would be a step-by-step plan to walk the PEP team briskly through the process towards completion. Such a plan could be pulled from those projects that have proven to be most efficient and the most effective. The Corps has already made available a set of generic "RFP" guidelines for the three types of study covered by PEP. However, the majority of the PEP team's time is spent in the process of data collection and analysis. A guide to quicken this portion of the project would only function to further increase the efficiency. At most, it would mean preparing three plans (wastewater, water supply and solid waste): a number that is easily accommodated. The Corps has "streamlined" other programs by using this "cookie cutter" technique. If PEP is

to continue in an efficient manner a solid set of guidelines would prove invaluable.

Some may argue the step-by-step approach to be a setback. It could give some the impression that with the guidelines in hand, anyone could perform such a simple task, and that a highly skilled team is not necessary. I would like to refute that theory. As I explained earlier, it is important that all members of the PEP team be highly knowledgeable in the areas of environmental infrastructure. Without some experience even the most intelligent person could have trouble simply understanding the language. On the other hand, qualified representatives will be able to identify problems surrounding the current system and communicate means to upgrade. Considering community size, future development, applicable laws, and the resource base a skilled team will be able to suggest the benefits of the different upgrade systems that are currently available. Hence, a plan outlining what tasks must be completed in order to develop a MFS and RFP could be followed efficiently only by people with the proper background in environmental infrastructure. The plan would become a means to reassure the PEP team and the Sponsor that all aspects are being covered in a timely and efficient manner.

And finally, I would like to address the potential benefits of the PEP program to the Army Corps of Engineers as a Federal agency. PEP could become a great public relations tool at a time when the government and the Corps aren't looking too "green". Gaining public trust by showing that the Corps is willing to listen to community needs and to take part in providing improvements will greatly enhance the tarnished image of this large agency. Such a change in attitude could be facilitated through the PEP projects. Even though the Corps essentially becomes an impartial third party, it can be credited with conducting the study and effecting positive environmental change, while it incurs no obligation to provide funding for the actual upgrade. Meanwhile, through privatization, the Federal government is relieved of funding one more infrastructure facility. As an added benefit, there are no Federal production delays involved: the private world is capable of instituting change much more quickly than the public sector. Undertaken in an efficient manner, the program can only reflect positively on the U.S. Army Corps of Engineers.

CONCLUSIONS

In 1988, the Assistant Secretary of the Army (Civil Works), Robert W. Page, envisioned the Corps helping communities shed the burden of deteriorating environmental support facilities (USACE 1990a). Privatization was the key. In keeping with the Assistant Secretary's vision, Lieutenant General H.J. Hatch, upon becoming Chief of Engineers, put together a promotional pamphlet that was distributed to all Corps employees. The booklet, entitled *Our Vision,* was designed to be "a roadmap for direction, a framework for action, and a guideline for how to operate". In it the Chief included a new statement under the section titled *Our Pledge.* He vowed to "seek a broader role in developing, managing, maintaining, and repairing our Nation's infrastructure."

In May 1990, the Corps presented Partners for Environmental Progress to the public as "Infrastructure Opportunities for Privatization"(USACE 1990a). This new program was modelled after a similar U.S. Environmental Protection Agency(EPA) program. In 1989 the EPA ran a number of demonstration projects under its Public-Private Partnership Initiative (P3) (Reilly 1991). The two agencies planned to work together in executing their separate programs; therefore, both programs focused on the same three media areas initially outlined by the P3 program. When the "united" plan dissolved, the Corps' focus remained unchanged. PEP maintained water supply, wastewater and solid waste as its main areas of interest.

Now the question is asked by the current Assistant Secretary (Civil Works), Nancy Dorn: Should the Corps be dealing with the problems of solid waste? Based upon recommendations provided by the TRT, and a status review meeting that she held with the Director of Civil Works Ms. Dorn formulated her answer. In a memorandum written by her to the Director of Civil Works she commented on the continuation of the program. The Assistant Secretary of the Army has determined that, although she can point out no immediate benefit to the agency, since it does provides significant benefits to the communities PEP should be allocated funds through FY 1994. However, her letter stated that the program would be funded only on a conditional basis. Dorn indicated that the Corps should no longer deal with solid waste issues. The project managers were to concentrate on small

and disadvantaged communities. Furthermore, she wrote that funds would be cut unless the program proved itself. If privatization does not result from the majority of projects or if interest wanes, PEP will be cancelled.

The Official Mission of the U.S. Army Corps of Engineers provides significant justification for these conclusions. Traditionally, the Corps has been dedicated to developing, managing, and protecting the water resources of this nation. However, it has been noted by Clarke and McCool in *Staking Out the Terrain* that "the Corps rarely turns down an opportunity to expand its horizons". In recent years, the Corps has searched the horizons of environmenal infrastructure dilemmas for a means to expand. Perhaps this is an indication that the Corps should reevaluate its mission as most other agencies do every few years. Still, it is the EPA that is currently directed by Congress to regulate pollution in the areas of air, water, and solid waste, to name a few (Lesko 1986).

Therein lies the conflict surrounding the Central Ohio project. On one hand, we find the Corps not only willing to confront many environmental infrastructure issues, but also armed with the manpower qualified to prepare a valuable study. Granted, the Corps' representatives may currently lack the desired infrastructure experience. With limited time and effort, the highly adaptable representatives of this agency could soon aquire the necessary knowledge. The Corps is known for its ability to excel in the face of any new challenge. Furthermore, the changing atmosphere of national policies should not be overlooked. Now that the cold war has ended, the Corps' Defense spending is being reduced. Traditional Civil Works projects are also on the decline for this agency. Only operations and maintenance projects have remained stable. Clearly, the Corps has a vested interest in expanding its horizons simply to stay in business.

On the other hand sits a purely regulatory agency, the EPA. It is a youthful, yet quickly expanding agency with a "mission so broad that it is supposed to control everything" (Clarke and McCool 1985) from noise pollution to radiation. Still, as overburdened as it may be, this agency clearly houses the expertise needed to advise communities on environmental infrastructure upgrades. The EPA may not be as refined, nor as respected as the Corps for its management techniques, but it may be in the best position to advise on

issues that it currently regulates. In conclusion, this problem of overlapping interests and missions must be dealt with before the number of privatization programs increase.

Prior to April 30, 1992, only three Federal agencies (Corps, EPA and DoE) had initiated privatization programs. However on that date, President Bush issued *Executive Order #12803* "urging the...review...of federally financed infrastructure assets owned by state and local governments...and to assist...in their efforts to privatize". This means many more agencies will soon be entering the business of encouraging privatization. The difficulties of dealing with just two agencies that maintain overlapping interests has already been identified. Before additional agencies and departments are brought into the picture, roles of responsibility must be defined. In an effort to increase efficiency it would seem most logical to have those armed with the necessary expertise combat the infrastructure dilemmas that clearly fall within their realms. For instance, it seems logical that the EPA should deal mainly with projects that focus on pollution control and abatement. Likewise, it seems that the Corps should limit its scope to solving only water resource problems.

Though Corps' traditional mission is to manage and execute water resource development projects, as an agency it definitely qualified to take on other responsibilities of an environmental steward. Realizing its intention to broaden its mission in the specific area of environmental infrastructure, and having concluded that at this time it is unable to supply the expertise needed to fully analyze all these problems, some other vital role must be available for this competent agency. It is my suggestion that the Corps serve as manager of a Federal Program Clearinghouse Committee. Clearly such a role will be necessary to effectively organize the forthcoming multitude of privatization programs. And, it should be pursued as an interagency effort. However, as an agency with nearly a century of managerial experience in the Civil Works arena the Corps seems the best suited agency to head this committee.

A Federal Program Clearinghouse Committee could help prospective sponsors gain assistance with infrastructure privatization projects. Such an integrated system could coordinate all the various agencies involved in privatization programs. Considering the type of infrastructure, sponsor qualifications, and the

appropriately identified regulating agencies the Committee could direct the sponsor to the agency that is most qualified to provide the needed assistance. Even without the Assistant Secretary's orders, this panel would likely eliminate the Corps' work on solid waste projects and other such infrastructure dilemmas that are inconsistent with the agency's mission. PEP representatives of the Corps who have previously dealt with solid waste projects undoubtedly feel competent to do so again. However, it is unlikely that, with just one year of experience, they could be as qualified as the representatives of the EPA to deal with such issues. True efficiency means allowing the experts to do the work. The most efficient system will assure that our Nation's communities receive the best advice, hence the greatest chance to accomplish privatization of their environmental infrastructure facilities. With the Corps at the helm, this ship of privatization programs is likely to ride the waves into a calm bay of organizational efficiency.

SUMMARY

In summary, the privatization process that I have proposed will begin at the District offices of each agency that conducts such a program. Each District will assemble a team of highly qualified members. Once a team is assembled, the District will notify the communities within its jurisdiction of the program. Interested communities should be instructed to contact the Corps managed Program Clearinghouse Committee. The members of this Committee will review the projects submitted by the prospective Sponsors and direct those that are eligible to the proper agency. (Those that are not eligible will be requested to review past privatization reports.) The Clearinghouse Committee will then notify the agency of the community's interest in their respective program.

If the Corps is the appropriate agency to assist a community, a meeting will take place to discuss the scope of studies. On an annual basis each Corps team will present PEP proposals to the Technical Review Team (TRT) in Huntsville, Alabama. Upon review, the TRT will then choose a given number of projects relative to the FY budget. Those communities that are chosen to participate will be contacted immediately by their District office.

The new partners of each PEP project will then meet to formulate an Agreement. In a week-long meeting they will discuss the goals and objectives

of the project. Together, the partners will itemize the responsibilities of each party and devise a schedule of future meetings. Once this is done it is important to formulate a task schedule to indicate when particular items are due and which members are responsible for their completion. At this time, the Sponsor group must meet to choose their its project manager, and to devise its own schedule of meetings and a task schedule. Accordingly, each meeting between the Corps and the Sponsor and among the Sponsor members should be preceded by a review period. Most importantly, both parties must take reponsibility to ensure that the project is completed in an efficient and professional manner. For instance, members must be prepared to attend the regularly scheduled meetings. They must work diligently to maintain open lines of communication. And, they must keep the others informed of advancements made that may alter the outcome of the project. To be concise, the members of the PEP projects must work together as a team to efficiently complete the task at hand.

As stated by Ms. Dorn, the future of the PEP program is dependent on the outcome of the current projects. If they are not conducted in a manner befitting the importance of the task the program will be ineffective, then cancelled. This will result not only in the loss of projects for Corps employees nationwide, but it will also inevitably delay the much needed upgrading of our Nation's environmental infrastructure systems.

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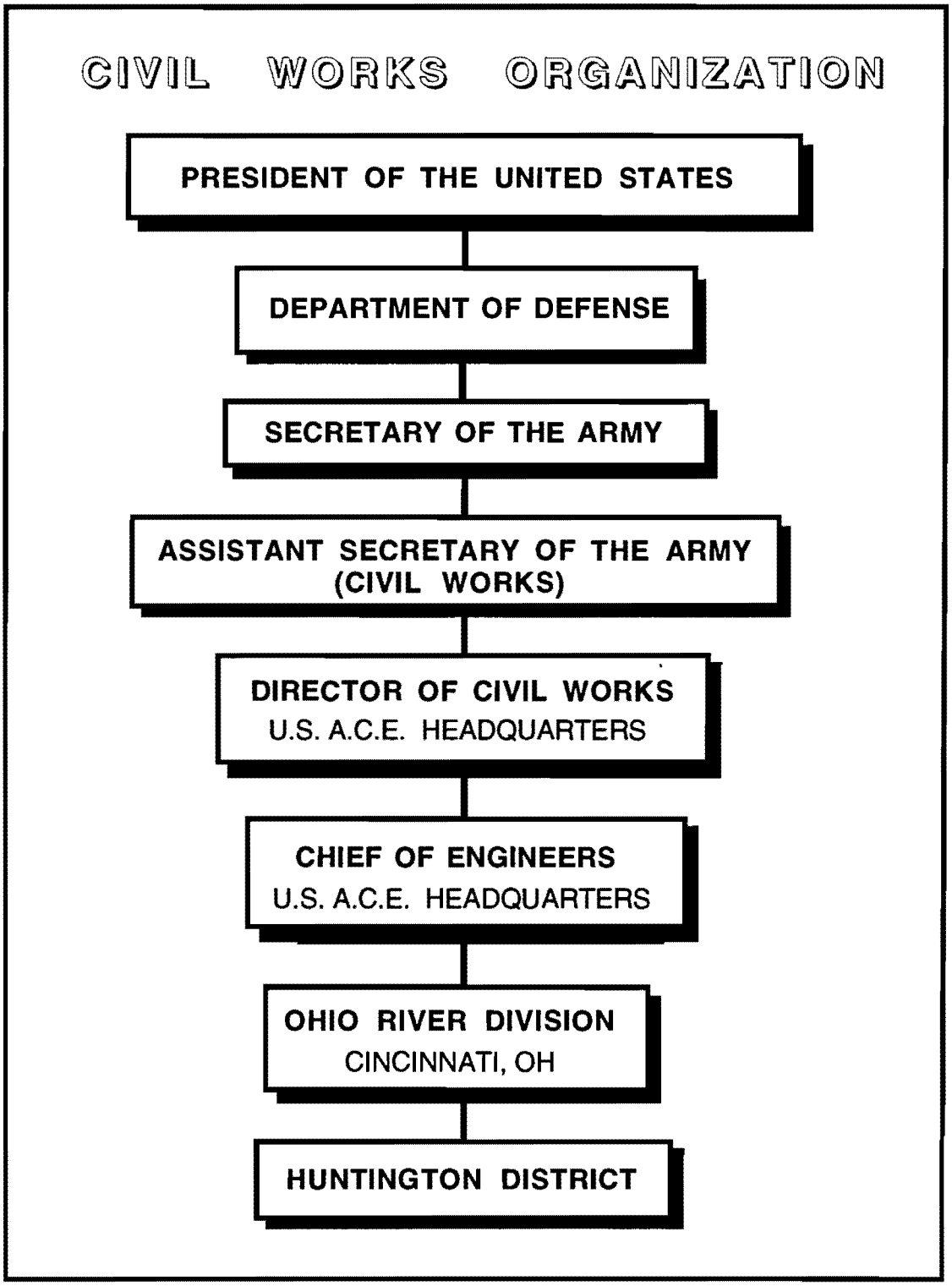


Figure 1. Civil Works Organization. (USACE 1990b).

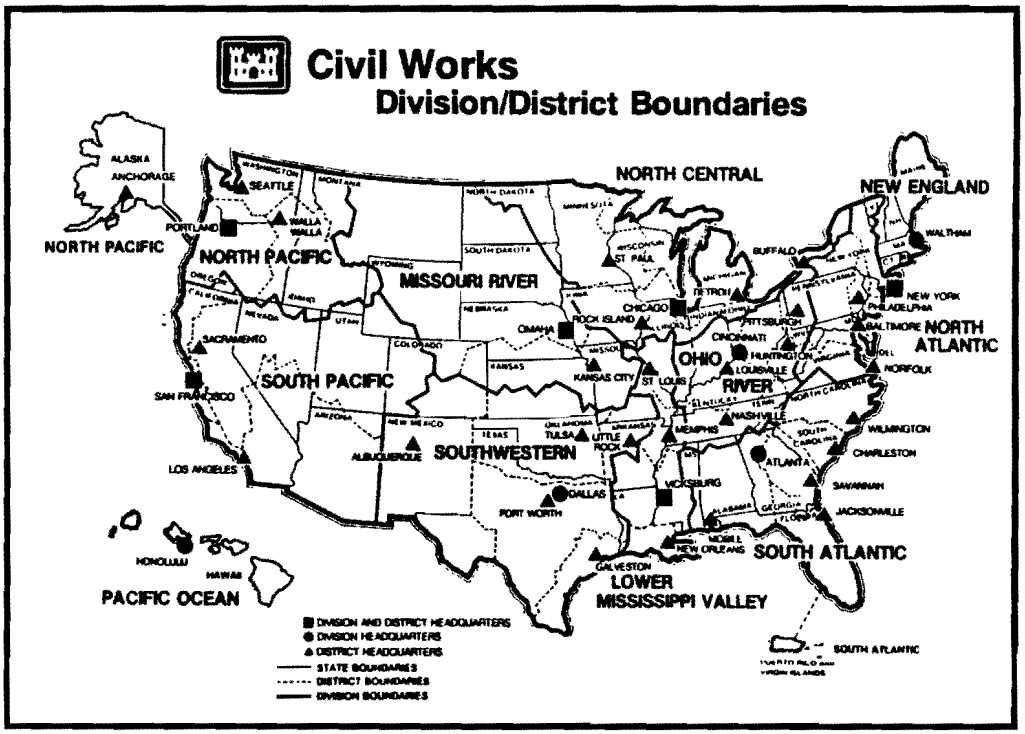


Figure 2. Civil Works Boundaries. (USACE 1990b).

REGULATIONS RESTRICTING SOLID WASTE DISPOSAL IN OHIO		
ACT	**AGENCY**	**MANDATE**
CAA (Clean Air Act)	US EPA	• limits emissions of individual pollutants into the air
CWA (Clean Water Act)	US EPA	• regulates disposal facilities generating ash quench water, landfill leachate and surface water discharges
HB 592 (Ohio HOUSE BILL 592)	Ohio EPA	• reguires each solid waste district to develop a long-term master plan
PURPA (Public Utilities Regulatory and Policy Act)	US EPA	• reguires investor-owned utilities to purchase power from cogenerators, thus guaranteeing a market and fair price for said energy
RCRA Subtitle D (Resource Conservation and Recovery Act)	US EPA	• establishes technical standards for the environmentally safe operation of solid waste disposal facilities; reguires monitoring of water and gas leakage; restricts location, design, and operation; mandates corrective action, and performance standards
SDWA (Safe Drinking Water Act)	US EPA	• reguires the protection of current and future wellhead sites

Figure 4. Regulations Restricting Solid Waste Management. (USEPA 1989).

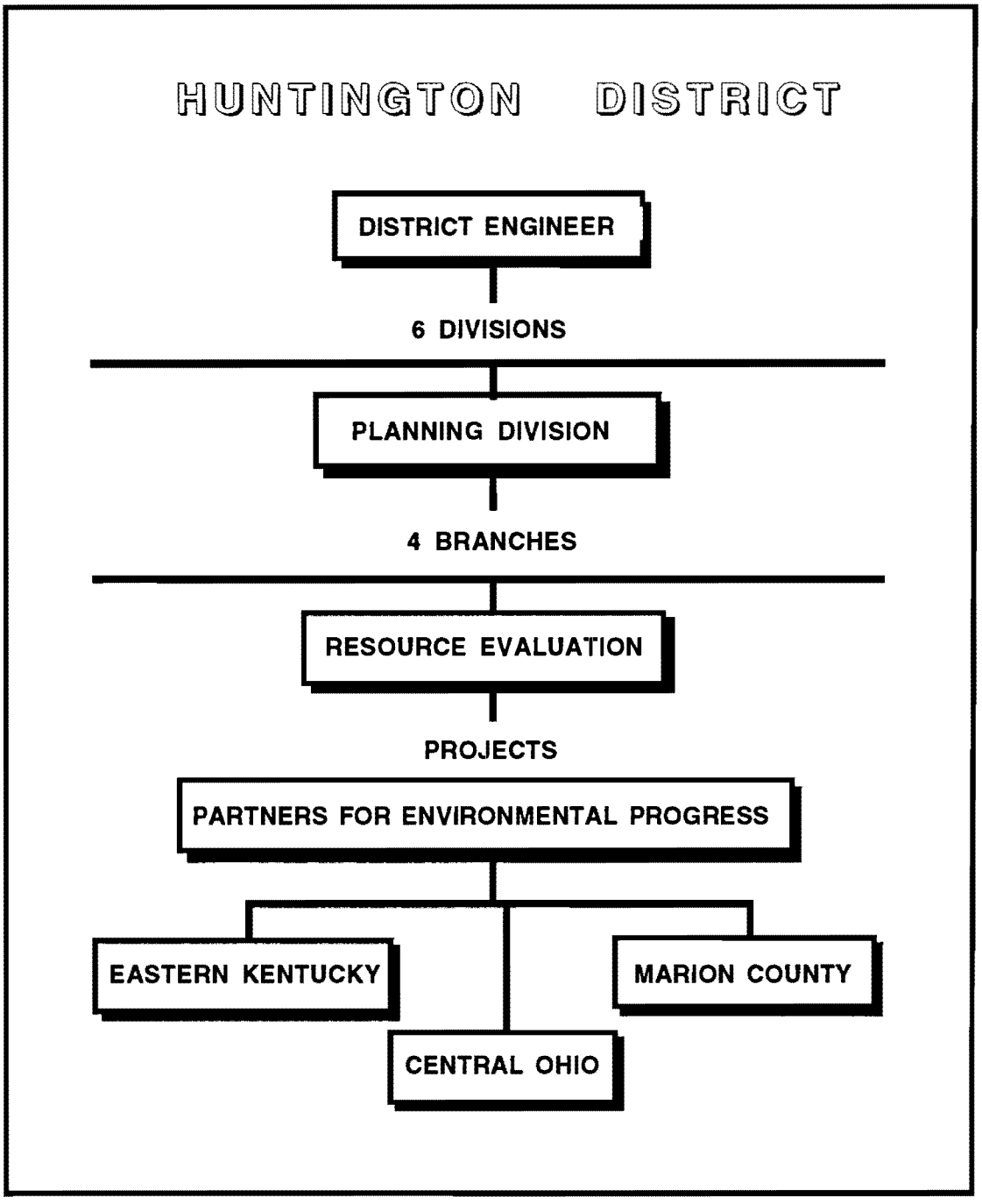


Figure 3. Huntington District Organization (a partial diagram).

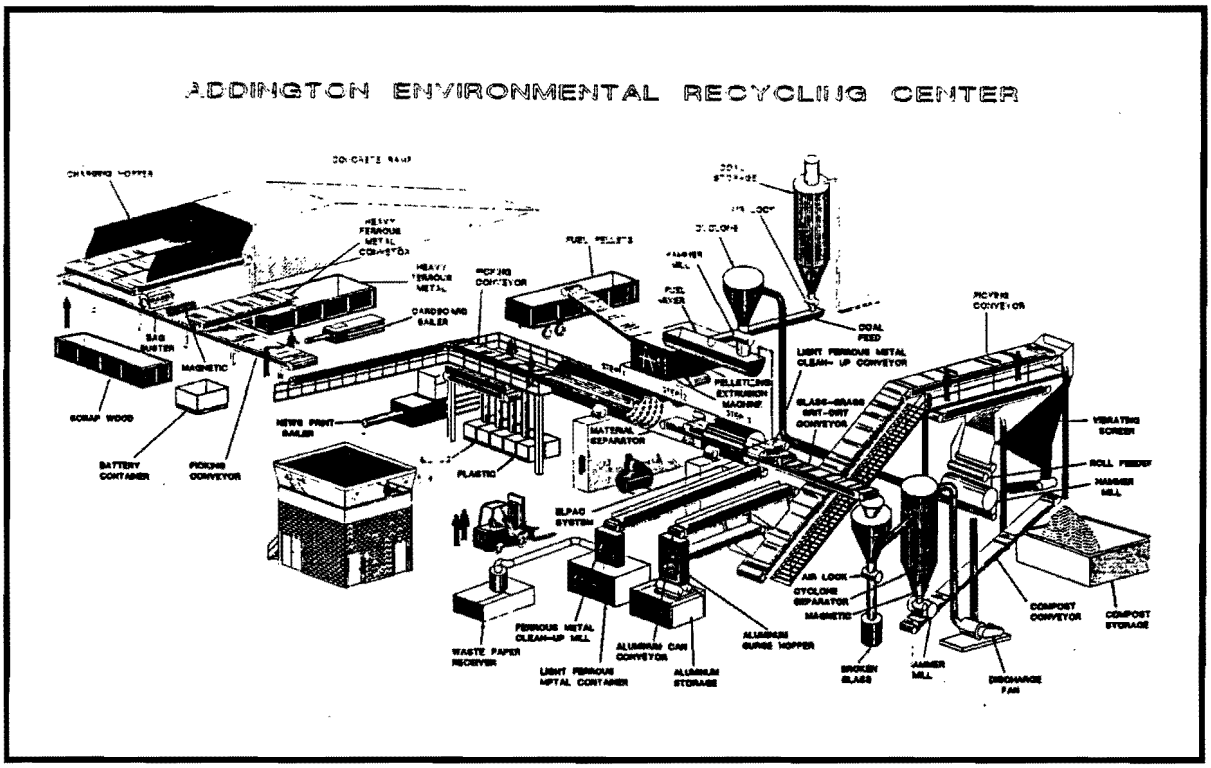


Figure 5. Front-End-Separator. (Addington c.1990).

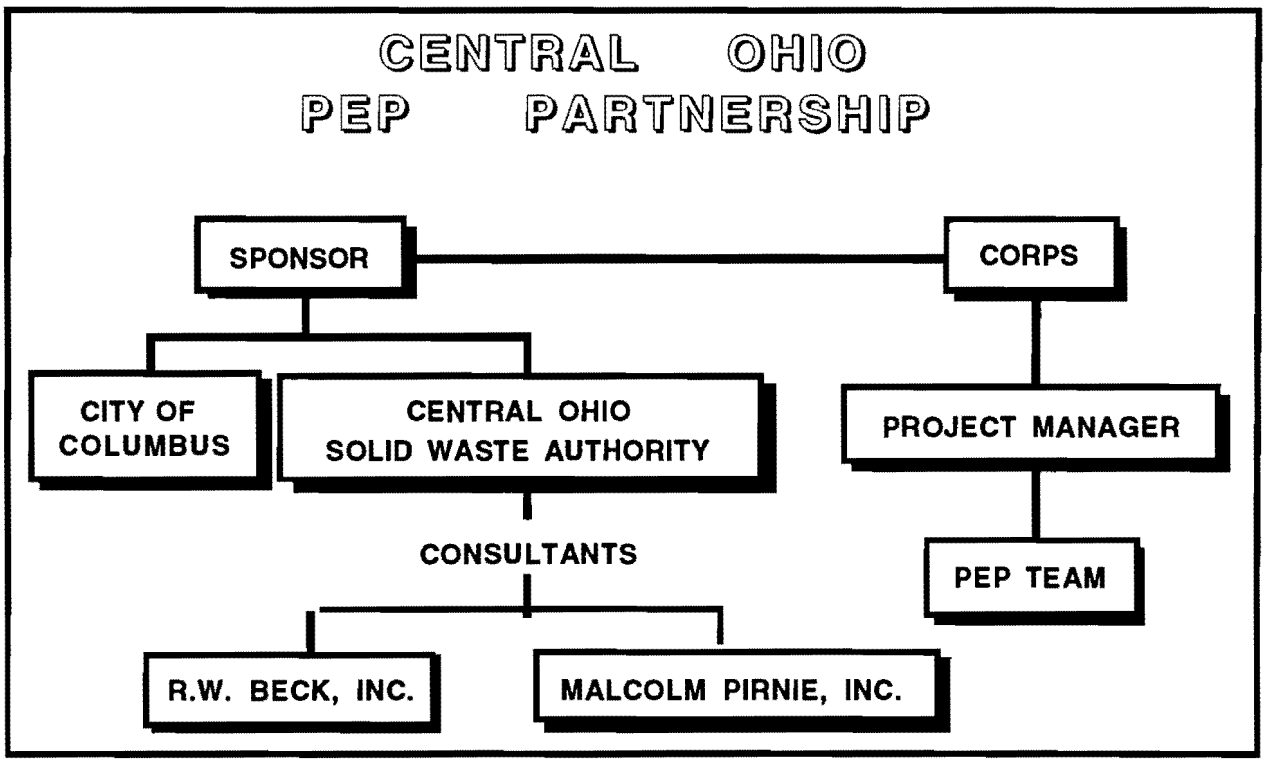
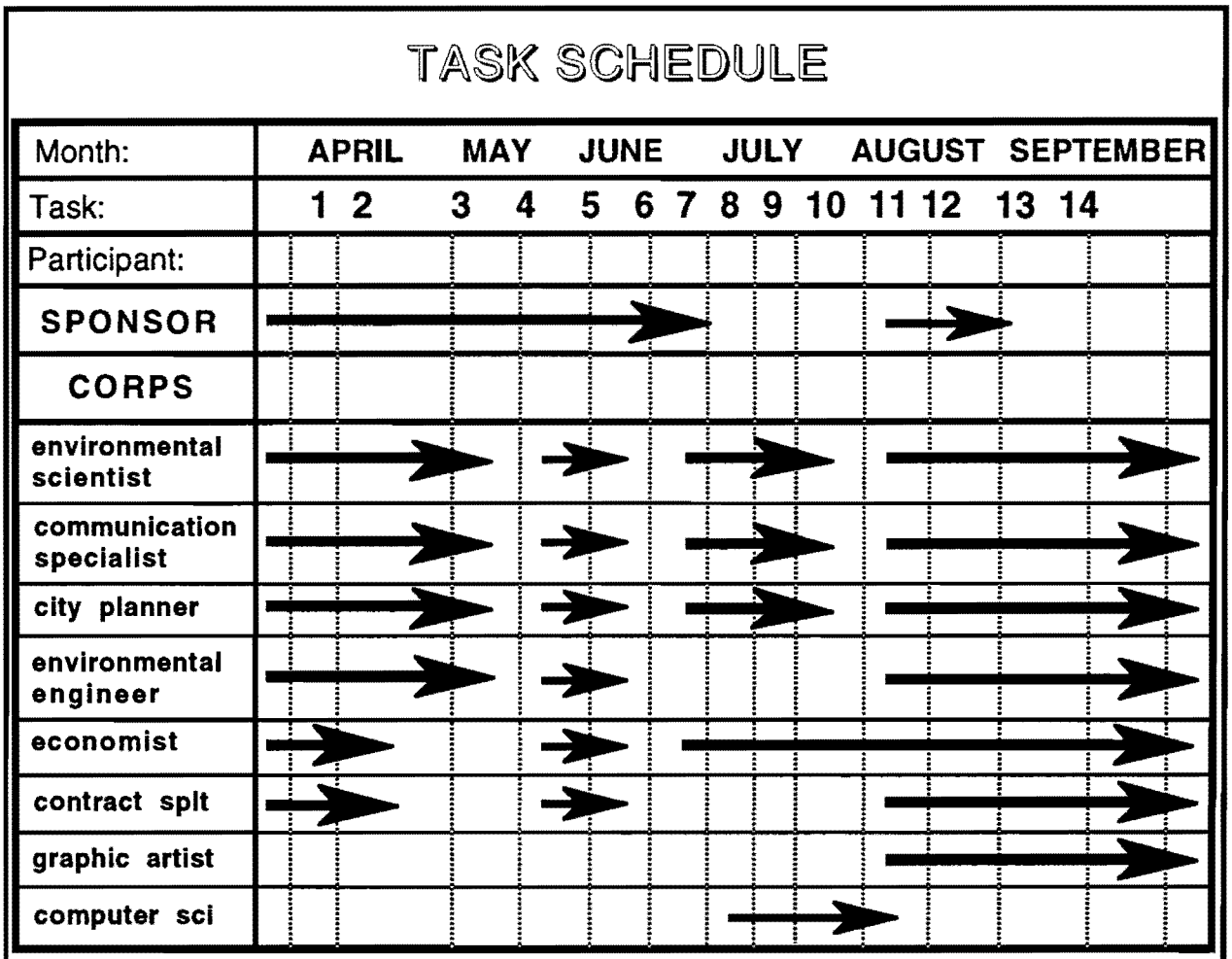


Figure 6. Central Ohio PEP Partnership.



Tasks:

1 Day-long meeting to review goals and objectives
2 Data collection
3 Institutional Factors (Federal, State and local laws and regulations)
4 Analysis of alternatives (based on previously derived information)
5 Findings and conclusions meeting (target system for implementation)
6 Develop design criteria (produce Design Criteria Manual)
7 Review Meeting
8 Establish revenue potential
9 Evaluate privatization options
10 Analyze Return-on-Investment
11 Draft report
12 Review report
13 Final report
14 Prepare Request for Proposal
FT Facility tours, up to seven will be arranged by the Sponsor (all Corps members should be involved, except the computer scientist)

Figure 7. Sponsor and Corps Task Schedule.